

REMARKS/ARGUMENTS

In the most recent Office Action, claims 1-19 were examined. Claims 1-19 are rejected. Claim 16 is amended. Accordingly, claims 1-19 are pending in the present application. No new matter is added.

Applicants acknowledge with thanks the thorough examination and search conducted by the Examiner in the present application. With regard to the comments in the Office Action, applicants respond as follows.

Specification

The Office Action states that the title of the invention is not descriptive. The Office Action further states that a new title is required to clearly indicate the invention to which the claims are directed.

Applicants respond by submitting an amended title for the application. Applicants respectfully submit that any objection to the title of the disclosure is overcome, and respectfully request entry and notice to that effect.

Claim Rejections - 35 U.S.C. §102

The Office Action states that claims 16-19 are rejected under 35 U.S.C. §102(b) as being anticipated by Erickson (U.S. Patent No. 5,436,557). In particular, the Office Action states that Erickson discloses each and every claim element of claims 16-19. The rejection is respectfully traversed.

The disclosure by Erickson shows a prior art figure for sensing current in an electrical conductor that is passed through the prior art device illustrated by Erickson. The disclosure by Erickson indicates that a magnetically sensitive component is disposed in a ceramic package that is connectable to a printed circuit board (column 3, lines 33-41).

However, the present invention in claim 16 calls for:

a current sense structure for sensing the current in an elongated conductor of a power semiconductor device;

said current sense structure comprising a printed circuit board having an edge portion; and

a magnetic field transducer mounted on the surface of said printed circuit board and adjacent said edge portion.

The device illustrated by Erickson shows a magnetically sensitive component that is mounted in a ceramic chip package, rather than being mounted on the surface of the printed circuit board as recited in claim 16. In addition, the device disclosed by Erickson is for a generalized electrical conductor, while the present invention recited in claim 16 calls for sensing current in a conductor of a power semiconductor device. Accordingly, the present invention recited in claim 16 calls for elements that are not disclosed in the cited prior art reference by Erickson. Because the prior art does not show elements claimed in the present application in claim 16, the rejection of that claim under 35 U.S.C. §102(b) should be overcome, and applicants respectfully request that it be reconsidered and withdrawn.

Claims 17-19 depend upon claim 16, and include all of the limitations of the independent claim. Accordingly, claims 17-19 should be allowable over the prior art disclosure by Erickson for all the same reasons that claim 16 is allowable, and in addition, because of the further limitations recited in each dependent claim. Applicants thus respectfully submit that the rejection of claims 17-19 under 35 U.S.C. §102(b) is overcome, and respectfully request that it be reconsidered and withdrawn.

Claim Rejections - 35 U.S.C. §112

The Office Action states that claims 1-15 are rejected under 35 U.S.C. §112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. In particular, the Office Action states that it is unclear in the specification how a described control circuit can control current flow in a power semiconductor device. The Office Action goes on to question how current can be controlled in a power semiconductor device without a feedback signal. The rejection is respectfully traversed.

Applicants have described with particularity the relationship between the various control devices, including a control circuit 45 and a control integrated circuit chip 46, with that of the power MOSFET illustrated in Figures 1-4 of the present application (see, e.g., page 3, line 14- page 4, line 4). That is, the power MOSFET carries current that is conducted to an upright conductor, the magnetic flux of which is measured according to the present invention. This is a very simply and straightforward control mechanism that is ubiquitous in the art. It should be evident to those skilled in the art that the control devices described and illustrated are capable of controlling the current in a power semiconductor to which they are coupled, whether or not a closed loop or open loop control scenario is applied. Accordingly, applicants respectfully submit that the specification, including the description and drawings, convey to one of ordinary skill in the relevant art the operation of the present invention with reasonable certainty so as to apprise a skilled artisan that the inventors were in complete possession of the subject matter recited in claims 1-15. Applicants thus respectfully submit that the rejection of claims 1-15 under 35 U.S.C. §112, first paragraph, is overcome, and respectfully request that it be reconsidered and withdrawn.

To the extent that the Examiner does not recognize that an open loop control system for a power semiconductor is readily available to a person of ordinary skill in the art, applicants respectfully request that a review by a primary or supervisory examiner is undertaken with regard to the present application and the knowledge available to one of ordinary skill in the art. M.P.E.P. §707.01.

Conclusion

Applicants have carefully reviewed the prior art references cited in the most recent Office Action, and believe that the claims presently pending are patentable over all the references, either alone or in combination. Applicants further believe that the present response addresses all outstanding issues in the most recent Office Action. In view of the above discussion and amendments, applicants respectfully believe that the application is now in condition for allowance, and earnestly solicit notice to that effect. If it is believed that an interview would

contribute to progress towards allowance of the application, or obtaining well-defined issues in the examination of the application, the Examiner is requested to contact the undersigned counsel at the number provided below.

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to: Mail Stop Non-Fee Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on May 5, 2003:

Brendan J. Kennedy

Name of applicant, assignee or
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Brendan Kennedy
Signature

May 5, 2003

Date of Signature

Respectfully submitted,

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